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APPLICATION NO.	PPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/719,342	10/719,342 11/21/20		Valdimir Sklovsky	CS22954RA/10-192	3315			
23400	7590	03/22/2005		EXAM	EXAMINER			
POSZ LAW		•	PATEL	PATEL, NITIN				
11250 ROGER BACON DRIVE SUITE 10				ART UNIT	PAPER NUMBER			
RESTON, V	'A 20190	ı	2673					

DATE MAILED: 03/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

\		Applicati	on No.	Applicant(s)	
		10/719,3		SKLOVSKY ET AL.	
Office Action Su	ımmary	Examine		Art Unit	
	•	Nitin Pate		2673	
The MAILING DATE of	this communication			e correspondence address	
Period for Reply					
A SHORTENED STATUTOR' THE MAILING DATE OF THI:  - Extensions of time may be available un after SIX (6) MONTHS from the mailing.  - If the period for reply specified above is.  - If NO period for reply is specified above.  - Failure to reply within the set or extend Any reply received by the Office later the earned patent term adjustment. See 3:	S COMMUNICATIOn der the provisions of 37 CFI date of this communication less than thirty (30) days, as, the maximum statutory peed period for reply will, by stan three months after the maximum safter	N. R 1.136(a). In no ev . reply within the stal riod will apply and w atute, cause the app	ent, however, may a reply be utory minimum of thirty (30) ill expire SIX (6) MONTHS fo lication to become ABANDO	e timely filed  days will be considered timely.  rom the mailing date of this communication  DNED (35 U.S.C. § 133).	<b>1</b> .
Status					
1) Responsive to commun	ication(s) filed on 2	1 November 2	003.		
2a) ☐ This action is FINAL.		This action is r	<del></del>		
<u>'</u>	•—			prosecution as to the merits is	;
closed in accordance w		-			
Disposition of Claims					
4)⊠ Claim(s) <u>1-22</u> is/are per	nding in the applicat	ion.			
4a) Of the above claim(s	s) is/are with	drawn from co	nsideration.		
5)⊠ Claim(s) <u>17-21</u> is/are al	lowed.				
6)⊠ Claim(s) <u>1,2,4-9 and 12</u>	-15 is/are rejected.				
7) Claim(s) <u>3,10,11,16,22</u>	is/are objected to.				
8) Claim(s) are sub	ject to restriction an	d/or election r	equirement.		
Application Papers					
9) The specification is obje	cted to by the Exam	niner.			
10)☐ The drawing(s) filed on _	is/are: a)□ a	accepted or b)	objected to by th	e Examiner.	
Applicant may not request	that any objection to	the drawing(s) t	e held in abeyance. S	See 37 CFR 1.85(a).	
Replacement drawing she	et(s) including the cor	rection is requir	ed if the drawing(s) is	objected to. See 37 CFR 1.121(d	I).
11) The oath or declaration	s objected to by the	Examiner. No	te the attached Offi	ce Action or form PTO-152.	
Priority under 35 U.S.C. § 119				·	
12) Acknowledgment is mad a) All b) Some *.c) [		ign priority un	der 35 U.S.C. § 119	(a)-(d) or (f).	
_	f the priority docum	ents have hee	n received		
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Attachment(s)	20				
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i) 🛛 Information Disclosure Statement(s			5) Notice of Informa	Patent Application (PTO-152)	
Paper No(s)/Mail Date <u>2/17/2004</u> .	···		6) Other:		
Patent and Trademark Office OL-326 (Rev. 1-04)	Office	e Action Summa	ry	Part of Paper No./Mail Date 0318200	)5

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### **DETAILED ACTION**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1,2,4-6,8,9,12-14 are rejected under 35 U.S.C. 102(b) based upon a public use or sale of the invention. Oguchi (U.S. Patent No. 4,943,801).

As per claim 1, Oguchi shows a display panel (element 9); a display controller that controls the display panel (element 7 In Fig.1); a plurality of data lines that supply image data to the display panel (In Fig.1 Md0- Mdf), the data lines include data lines for supplying red image data, data lines for supplying green image data, and data lines for supplying blue image data (In a display panel data inherently could be red or blue or green); and masking gates (In Fig.1 element 5-0 to 5-150) that mask selected ones of the data lines at predetermined times to adjust the pixel depth of the image data supplied to the display panel (In Col.2 lines 26-37 and In Abstract).

As per claim 2, Oguchi shows the electronic device includes a processor (connected to host processor In Fig.1) coupled to the masking gates (In Fig.1 element 5-1 to 5-150), and the processor provides one or more control signals to an input of each of the masking gates (In col.3 lines 23-28).

As per claim 4, Oguchi shows the masking gates are coupled to an input of the display controller (In Fig.1 element 4).

As per claims 5,6 Oguchi shows a display panel interface, wherein an output of the display panel interface is coupled to an input of one or more of the masking gates (In Fig.1 element 6) buffer, wherein an output of the video buffer is coupled to an input of one or more of the masking gates (In Fig.1).

As per claim 8, Oguchi shows the masking gates include an AND gate (In Col.3 lines 65 to col.4 lines 1-5).

As per claim 9, Oguchi shows of an electronic device by reducing the pixel depth of image data transmitted to a display panel, wherein the method comprises masking selected data lines that transmit image data to the display panel at certain times (In Col.3 lines 46-63 and Col.4 lines 18-30 and In col.5 lines 22-37).

As per claim 12, Olguchi shows disabling the masking when the electronic device is not in a power saving mode (In Col.9 lines 14-25 sequencer is masking in logic mode 0 acted as a power off).

As per claim 13, Olguchi shows the masking is such that image data lines that are not masked are allowed to change value according to image data that is sent to the masking gates (In Col.9 lines 25-28).

As per claim 14, Olguchi shows the masking of selected data lines includes masking selected data lines coupled to the input of a display controller (In Fig.1 element 4).

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguchi (U.S. Patent No. 4,943,801) in view of Park (US 20040263461).

As per claims 7,15 Oguchi does not teach masking is performed on mobile phone. Park shows display driving circuit that could be used in a small cell or mobile phone (In section 0005). It would have been obvious to one of ordinary skill in the art, at the time of the invention was made to incorporate mobile phone device with teaching of Ogichi's because it would have decreased power consumption in a portable device.

### Allowable Subject Matter

5. Claims 3,10,16,22 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to teach or suggest the electronic device includes a processor, wherein the processor is coupled to the masking gates, and the processor causes the masking gates to mask the selected ones of the data lines when the electronic device is in a power saving mode as claimed in claims 3,10.

The prior art fails to teach or suggest, wherein masking reduces the pixel depth of the image data, and the method includes producing images based on a %11 pixel depth, when masking is not being performed, and producing images at a reduced pixel depth, when the masking is being performed, and the method includes

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using the same image data as a source when producing images based on a full pixel 10 depth and when producing images at a reduced pixel depth as claimed in claim 16.

6. Claims 17-21 are allowed.

The prior art fails to teach or suggest A method of reducing power consumption of an electronic device by reducing the pixel depth of video data transmitted to a display panel, wherein the method comprises masking selected data lines that supply red image data, selected lines that supply green image data, and selected lines that supply blue image data such that the selected data lines maintain a constant level when the electronic device is in a power saving mode as claimed in claim 17.

### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NP

March 18, 2005

Amare Mengirtu